R E P O R T R E S U M E S

ED 015 051 RC 002 006

OPPORTUNITIES FOR RURAL YOUTH IN RURAL AREAS.

BY- DOWLER, LLOYD

PUB DATE 23 OCT 67

EDRS PRICE MF-$0.25 HC-$0.36 7P.

DESCRIPTORS- *AGRICULTURE, AGRICULTURAL TRENDS, *EMPLOYMENT OPPORTUNITIES, FARM LABOR SUPPLY, *JOB TRAINING, JOB MARKET, JOB SKILLS, *OCCUPATIONAL INFORMATION, OPPORTUNITIES, *RURAL YOUTH, VOCATIONAL COUNSELING,

AGRIBUSINESS IS DEFINED AS THE SUM TOTAL OF ALL OPERATIONS INVOLVED IN THE MANUFACTURE AND DISTRIBUTION OF FARM SUPPLIES, PRODUCTION AGRICULTURE ON THE FARM, AND THE STORAGE, PROCESSING, AND DISTRIBUTION OF FARM COMMODITIES AND ITEMS MADE FROM THEM. WITHIN THESE THREE AREAS ARE SEEN MANY JOB OPPORTUNITIES FOR RURAL AND URBAN YOUTH HAVING COLLEGE DEGREES IN AGRICULTURE, HAVING JUNIOR COLLEGE OR HIGH SCHOOL EDUCATIONS, AND EVEN FOR DROPOUTS FROM ANY LEVEL OF EDUCATION. HOWEVER, IN SPITE OF THE EXCELLENT OPPORTUNITIES IN AGRIBUSINESS FOR YOUTH WITH TRAINING, ONLY 10 TO 12 PER CENT OF THOSE WHO LEAVE THE FARM FOR A COLLEGE EDUCATION RETURN. EVEN SO, AGRICULTURE SCHOOLS THROUGHOUT THE U. S. HAVE BEEN UNABLE TO MEET THE MANPOWER DEMANDS IN THIS FIELD. PROGRAMS ARE NEEDED THAT WILL PROVIDE THE FUTURE TRAINING FOR OUR RURAL AND URBAN YOUTH AND PERMIT US TO CONTINUE TO LEAD ALL OTHER NATIONS OF THE WORLD IN THE PRODUCTION OF FOOD AND FIBER. THIS SPEECH WAS PRESENTED AT THE NATIONAL OUTLOOK CONFERENCE ON RURAL YOUTH, OCTOBER 23-26, 1967, WASHINGTON, D. C., SPONSORED JOINTLY BY THE U. S. DEPARTMENTS OF AGRICULTURE, HEALTH, EDUCATION, AND WELFARE, INTERIOR, AND LABOR, OEO, AND THE PRESIDENT'S COUNCIL ON YOUTH OPPORTUNITY. (SF)

ED015051

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

Special Session on Employment of Rural Youth in Rural and Urban Areas

Speeches presented at
NATIONAL OUTLOOK CONFERENCE
ON RURAL YOUTH
October 23-26, 1967
Washington, D. C.

OPPORTUNITIES FOR RURAL YOUTH IN RURAL AREAS

Dr. Lloyd Dowler
Dean of Agriculture
Fresno State College
Fresno, California

RECEIVED DEC 13 1967 NMSU E.R.I.C.

Mr. Chairman, Ladies and Gentlemen:

I am indeed pleased to have an opportunity to take part in this National Outlook Conference on Rural Youth with emphasis on New Prospects for Rural Youth. I have enjoyed some 30 years of work with rural youth and have a real interest in the subject of this conference.

In studying my assignment I thought the opportunities for rural youth could be divided into four distinct categories. First, there are certain opportunities for rural youth with bachelor of science degrees in Agriculture; second, there is a need to discuss opportunities for rural youth with associate in arts degrees from our junior colleges offering the first 2 years of agriculture; third, there is a need to determine what opportunities remain for the rural youth with a high school education; and fourth, what opportunities exist for the drop out from each of these levels of education. In an effort to determine the opportunities for these four groups and to focus attention on new prospects, I should like to suggest that we concern ourselves with the full meaning of the word "Agribusiness" and keep the definition of this term foremost in our minds as we proceed with this conference.

Davis and Goldberg have defined Agribusiness as the sum total of all operations involved in the manufacture and distribution of farm supplies; production agriculture on the farm; and the storage, processing, and distribution of farm commodities and items made from them.[1] Let us take a practical situation and examine it in terms of this definition to be sure we understand how new prospects for rural youth may come about.

First, let us think of the definition as three links in a chain. The first link represents the kinds of service needed by the present-day farmer in order to grow his crops and raise his livestock. The middle link is the farmer or rancher. The third link in our chain represents the activities that take place after the various commodities have been grown--in other words, the transportation, storage, processing, marketing, and merchandizing of farm products.

RC 002006

1 Davis, John H. and Roy A. Goldberg, A Concept of Agribusiness, Harvard University, 1957.

Dr. Lloyd Dowler

To further illustrate our point, let us set up a hypothetical situation where we find the farmer looking ahead to a new crop year. Because our farms have continued to increase in size, one of the first supply items the farmer will need is working capital. If he is a good operator he has learned that it is good management to use the bank's money and he will talk to the bank's farm loan officer. This man is usually a college graduate with a degree in agribusiness or agricultural economics. At this point, if the farmer thinks the bank's interest rates are too high, he may decide to go to the Production Credit Association to negotiate a short term or intermediate type loan. Here again, the people he will be dealing with are likely to be college graduates with degrees in some major field of agriculture. Before he receives his money, in either instance, a budget will become necessary and a visit to his farm will be made by a bank or Production Credit Association appraiser who is likely to be a college graduate.

With his loan assured, the farmer can then proceed with other steps that must be carefully planned. If he has crops to be planted, he must have seed. The availability of the seed is dependent upon a competent research staff headed up by a plant breeder. Very likely, the plant breeder will be aided by a laboratory technician. In the first instance we are, again, talking about a college graduate, usually a man with at least a master's or doctor's degree in agriculture. The technician could be a junior college graduate with some specialization in agronomy. The sales force responsible for merchandizing the seed to the farmer, or to seed houses, is undoubtedly made up of college graduates with degrees in agronomy.

Before the seed is planted the seed bed must be prepared. To do this the farmer must have tractors, plows, cultivators, and planters. This permits the farm implement dealer to enter our agribusiness scene. The agricultural engineers who design or assist in the development of the machinery are in great demand, and they are usually college graduates with a B.S., M.S., or Ph.D. degree. Once the machine has been manufactured--and there are thousands of people without degrees working in the factories--there is a need for an office force, a sales staff, parts men, and repairmen to carry out the responsibilities at the dealership level. The sales force is likely to be college graduates with degrees in mechanized agriculture. The parts men and repairmen could be high school or junior college graduates. There is opportunity here for technicians for trouble-shooting assignments in the field and for follow-up after the sales have been made.

With the planting of the crop, it will soon be necessary for the application of water. The irrigator charged with this responsibility is frequently someone with less than a high school education. In many regions the installation of the irrigation system may offer quite an extensive list of opportunities. Wells may need to be drilled, pipe lines installed, or overhead sprinkler systems purchased to spread the water more uniformly. Here again, there are a wide variety of job opportunities for people with

various levels of education. The use of sprinkler systems offers many opportunities since there is a tremendous demand for portable, hand-move, and stationary lines for various crops, including turf grass production.

With the advancement of the growing season, the farmer will encounter both a weed and an insect problem. The chemical companies will be ready to meet his needs with a staff of fieldmen highly trained in agriculture who are capable of identifying the kinds of weeds and insects affecting the crop, and have the technical information on what spray is safe to use and will still be effective in its control measures. These people will have talked to the farmer earlier in the cropping program in an effort to sell him much needed fertilizers. These men function somewhat in the same manner as farm advisers and represent one of the largest sales forces on the agriculture scene today. The agriculture graduate working in this field of employment must have a good science foundation with a knowledge of soils, irrigation, plant pathology, plant physiology, entomology, and a thorough understanding of good business principles. The chemical companies offer tremendous opportunities for thousands of young people with high school, junior college, or college degrees to the doctoral level. This business is highly competitive. Not only is the company selling a commodity, it is also providing a service. The farmer who is intelligent enough to know how to use this college talent wisely can be assured of a real assist and will have a decided advantage over his neighbor who may question the knowledge of these young scientists.

The spray materials to be applied for control of the weeds and insects may need to be flown on. Here we will have opportunities for people who know how to fly either helicopters or aircraft with stationary wings to apply this material. Services needed by these highly specialized crop dusters can usually be provided by young people with less than college degrees. Not only are many of our crops treated for insect pests in this fashion, but the airplane is used extensively for crop seeding purposes.

Soon after the application of weedicides and insecticides, our crop should be ready to harvest. At this point the farmer may decide to avoid further investment in expensive equipment, therefore, he lines up someone to custom harvest his crop or crops. This procedure, I believe, will become more widely used as more expensive machines are developed to harvest crops where high cost manual labor is forcing mechanization at a rapid pace. Let us be sure and flag this statement because it points up an area for new prospects for both rural and urban youth.

The transportation of the crop, whether it be hay, grain, cotton, or melons, will involve truck drivers, trucks, gasoline or diesel, tires, and a maintenance crew or service crew. Youth with less than a college education will fill the positions at this point in our farming plan. It is ve very likely the crop being moved will come under the scrutiny of a county,

state, or federal inspector. These positions are usually civil service in nature and most job specifications written for such work suggest that a college degree in agricultural inspection and services is desirable, however, many junior college graduates are working in this very important field of employment.

The Food and Drug Administration is having difficulty in obtaining a satisfactory work force to check out tolerances of pesticides being used by farmers. Here again, there are opportunities for new positions such as technicians to operate laboratories in various areas throughout our counties in the United States. Once the crop has been cleared for any given market, the job opportunities start to increase in the area of processing and merchandizing.

I believe we have carried this agribusiness idea far enough now to where it becomes apparent that we have many more jobs for rural and urban youth with new prospects that may not have been thought of before. In California the Council of California Growers has stated that one out of every three jobs is dependent upon agriculture. I am sure many of you have thought of numerous work opportunities for rural youth which I have not mentioned in this hypothetical enterprise. Each phase, or link, of this agribusiness chain leads to a wide variety of work opportunities for rural youth.

A large percentage of our rural youth are leaving rural areas to obtain their education in urban centers. About 10 to 12 percent of those who leave the farm for a college education return to the farm to continue in this occupation, usually on a partnership basis with their parents. The ability of young people to become farm owners is decreasing due to the increased amount of money required to purchase the number of acres of land considered essential for an efficient operation. Mechanization has added to the amount of capital required for farm ownership. In 1964, for example, the size of the average farm in California was 457 acres, moderately above the National average of 333 acres. Average investment in land and buildings per farm, however, was $199,800, over four times the National average of $47,900. The agriculture schools throughout the United States have graduated over 9,000 young men and women each year for a period of 4 or 5 years and have been unable to meet the demands being made of them by agribusiness firms. The agriculture schools have been engaged in an extensive program of recruitment from city high schools in an effort to supply industry's needs more effectively. This may lead us to conclude that there are not enough rural youth eligible for admission to these agricultural schools to meet the needs of agribusiness industries in the future.

By conducting a study of 1,250 graduates from the School of Agriculture at Fresno State College, a bulletin titled "A Counseling Aid to Agribusiness

Dr. Lloyd Dowler

Opportunities"[2] has been prepared to help high school counselors better understand what is meant by "agribusiness" and to illustrate the kinds of jobs available. We must concentrate more of our efforts on urban youth if we are to obtain the young people needed by agribusiness industries, especially where a college degree is required. We cannot expect city youngsters to enroll in our schools of agriculture without putting forth a greater effort in recruitment.

The October issue of Changing Times contains an article titled "Promising Jobs in Agriculture" which supports the above statements, and even goes further by saying: "For those with the right training, the job prospects in agriculture have never been better....Nor are agriculture connected opportunities limited to those with college training. The rising demand for graduates of high schools, junior colleges, and technical or vocational institutions bodes well for the future, too, in such specialities as cow testing, artificial insemination, livestock trucking, well drilling, fencing, tilling, crop dusting, sales, machine servicing, feed grinding and mixing, packing, grading, processing, warehousing, and the operation of nurseries and greenhouses."[3]

Professor Woodin of Ohio State University has indicated that "students of vocational agriculture make their entry into agricultural occupations in a variety of ways. Generally, those who are entering farming, ranching, or production agriculture get their occupational experience in the farm business by working with their parents or by working for other operators. Those who enter off-farm agriculture occupations are more likely to find employment as members of an agribusiness or service occupation."[4]

In addition to the many opportunities we have identified for these non-degree and degree rural youth, we must not overlook such interesting opportunities as work with the Peace Corps, VISTA, and AID.

As I visualize the ever-increasing size of farms and the rapid mechanization changes that will continue to take place not only in the harvesting of crops but in the seeding and planting of crops, I cannot help but believe there will be a tremendous need for youth with capabilities of driving, repairing and servicing these high cost pieces of equipment. This in turn will mean new prospects for many young people. As this increase

---

2 Dowler, Lloyd, Dean of Agriculture, Fresno State College, A Counseling Aid to Agribusiness Opportunities, bulletin, 1963.

3 The Kiplinger Magazine, Changing Times, "Promising Jobs in Agriculture." October 1967.

4 Woodin, Ralph J., American Vocational Journal, Vol. 42, No. 6, "Occupational Experience in Agricultural Education." September 1967.

in mechanization continues there will be a real need for vocational schools to be located in key areas throughout the United States. The kind of equipment needed in any training program of this nature will be too expensive to be made a part of the regular complement of shop equipment usually found in our high school vocational agriculture departments, therefore, the area vocational school should be in the best position to meet this need.

The number of opportunities for rural youth to work as farm managers will increase. There has been a growing trend toward farm ownership by doctors, lawyers, and other professional people outside of agriculture which has created additional demands for capable farm managers. Large corporation farms are continually seeking good management personnel.

Seasonal work in agriculture will continue to provide many job opportunities for both rural and urban youth.

The Department of Employment in California with its farm labor offices located in various regions throughout the state was able to place over 30,000 youth during 1966. I believe both rural and urban youth provide an excellent source of manpower and with proper training can help prevent critical labor shortages. There is a definite move underway in California to get the high schools, junior colleges, state colleges, and universities to delay opening of school from 2 to 3 weeks in an effort to get crops harvested in a satisfactory manner. The tree fruit and grape industry has suffered severe losses during the past several weeks in the Central and San Joaquin Valley due to the inability of the grower to get adequate workers. This is a very complex problem requiring careful study if greater losses in food stuff is to be prevented.

Now, I presume we should be aware of some of the barriers that exert an influence on the employment opportunities for rural youth in rural areas. The two barriers that seem to come to the front most frequently in California are 1) the discussion of the adoption of higher minimum wages for minors and women workers in agriculture, and 2) the unionization of adult farm workers. It would seem a little unrealistic at a meeting of this kind to fail to recognize these two important points as we talk about the real opportunities for rural youth.

I hope the agribusiness idea has helped to generate some additional food for thought during this conference. It is my understanding that a very thorough national study of employment opportunities and training needs in agriculture is about to get underway including both on-farm and off-farm jobs. I am indeed pleased that the need to conduct a study of this kind has been recognized, and perhaps more important is the fact that the U. S. Office of Education and its various segments of vocational education will be working cooperatively with the U. S. Department of Agriculture, Commerce, and Labor and the American Association of

Dr. Lloyd Dowler

Schools Administrators in collecting this data. I am sure all of us will agree that such a joint effort in funding and carrying out the various tasks is more likely to be successful by this kind of cooperative effort. The results of this study should help every level of education plan programs that will provide the future training needed by our rural and urban youth and permit us to continue to lead all other nations of the world in the production of food and fiber.